

## **The Scenario**

A car hire company hires out vehicles to the general public. The vehicles can be cars or light vans.

For each vehicle the make and model, the registration number, the miles it has travelled and the mileage when maintenance was last carried out, are recorded. In addition the carrying capacity, expressed in kilograms, for each van is recorded, while the colour and capacity, in terms of number of seats, are recorded for each car.

Vehicles may be out on hire, available for hire or undergoing maintenance. Maintenance is carried out on each car every 12,000 miles and on each van every 20,000 miles.

Customers book vehicles through the company. The name and address of the customer to whom a vehicle has been hired are recorded. Customers can enquire as to the availability of vehicles. In the case of vans, the customer will be told the make and carrying capacity, while in the case of a car the carrying capacity, colour and make will be provided.

When a vehicle is returned from hire the new mileage is recorded. The vehicle is then made available for hire or put in for maintenance.

## **Your Task**

Your task is to design, implement, test and document a prototype system that enables the company to keep track of its stock. Your system should provide the following functionality. It should be able to:

- Provide the facility for adding or removing a vehicle from the fleet.
- Provide information on the availability of vehicles.
- Assign a vehicle to a customer, or make the vehicle available for hire or allocate it for maintenance.
- Report on the status of a vehicle, given its registration number.

- Identify the cars that have travelled in excess of 50,000 miles and the vans that have travelled more than 80,000 miles.

Access to the facilities of your system should be via text based menus that appear on the terminal screen. All input being via the keyboard.